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Four new host plants of *Synanthedon tenue* (Butler) (Lepidoptera, Sesiidae) in Japan

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Abstract Four new host plants, *Wisteria floribunda* (Leguminoceae), *Carpinus japonica* (Betulaceae), *Alnus serrulatoides* (Betulaceae) and *Quercus glauca* (Fagaceae) are recorded as hosts for *Synanthedon tenue* (Butler, 1878) from Honshu, Japan.

Key words Sesiidae, *Synanthedon tenue*, host plants, Japan.

The food habits of the larvae of the polyphagous clearwing moth, *Synanthedon tenue* (Butler, 1878) (Sesiidae) were noted previously (Arita & Gorbunov, 1995). The five known host plants, *Diospyros kaki* (Ebenaceae), *Salix* sp. (Salicaceae), *Castanea crenata* (Fagaceae), *Quercus dentata* (Fagaceae) and *Rubus crataegifolius* (Rosaceae) were recorded for this species from Japan (Yano, 1961 ; Arita *et al*., 1994 ; Arita, 1994 ; Arita & Gorbunov, 1995).

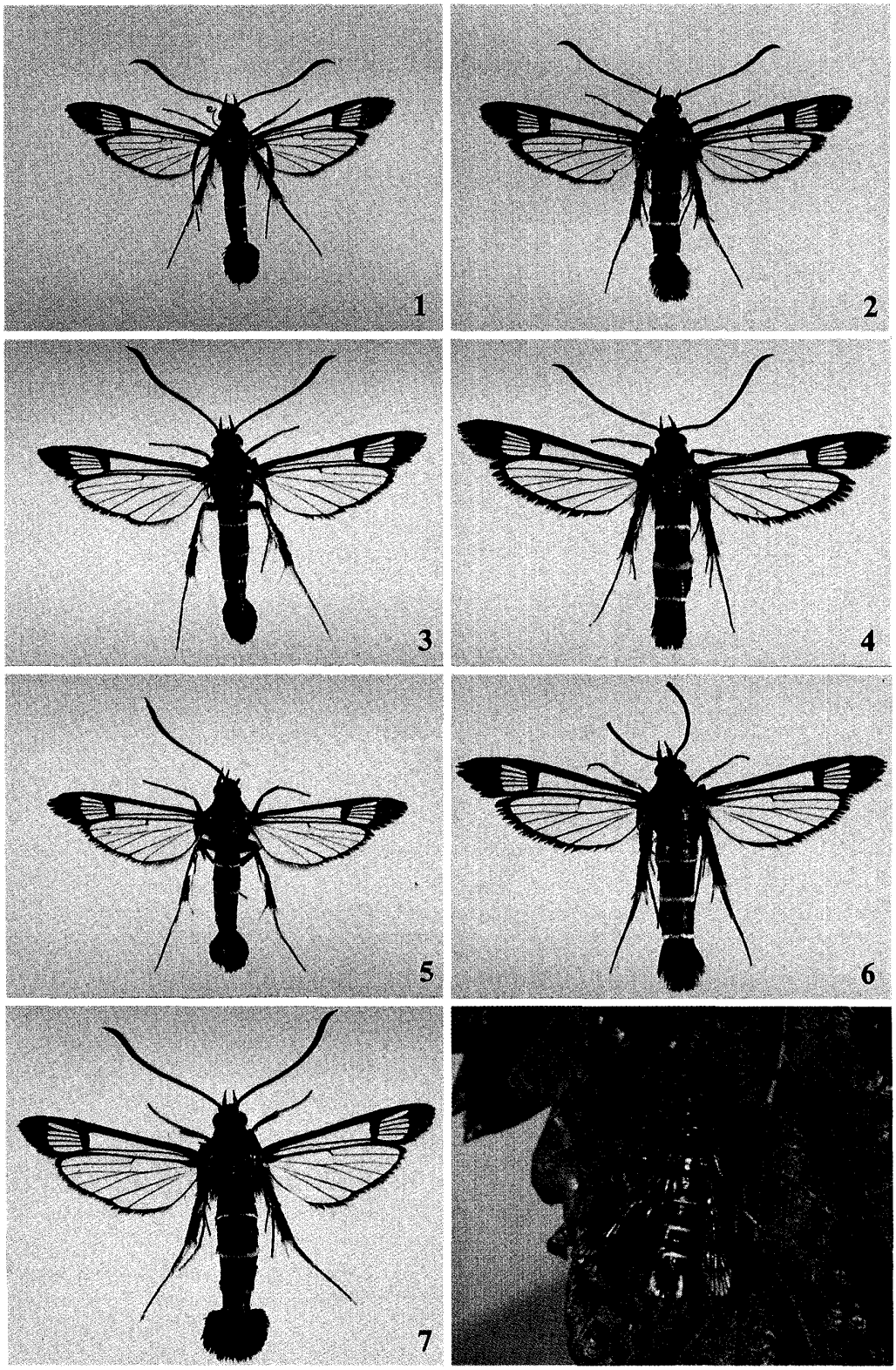
During our survey on the clearwing moths of Japan, we discovered four new host plants for *S. tenue*. The adults were bred from larvae feeding on the following host plants : from the vine galls of *Wisteria floribunda* (Leguminoseae) (Figs 1, 2, 8) ; from the trunks of *Carpinus japonica* (Betulaceae) (Figs 3, 4) ; from the small trunk of *Alnus serrulatoides* (Betulaceae) (Figs 5, 6) ; from the trunk of *Quercus glauca* (Fagaceae) (Fig. 7). On the latter plant, the larvae of *S. tenue* shared this host with *S. quercus* (Matsumuta, 1911). They were found in swellings filled with fine pellets of woody fragments. The larval bionomics of this species are highly variable. Though more often the larva bores between the bark and wood of the stem (*Rubus*) or trunk (*Alnus, Carpinus, Castanea, Diospyros, Quercus, Salix*) (Fig. 9), sometimes it can also cause a gall formation, for example, on the vine of *Wisteria floribunda* (Fig. 10). Hence, being a polyphagous species, *S. tenue* uses at least nine host plants belonging to six different families. The present example of such a widely polyphagous species is unusual in the Sesiidae.

Material examined

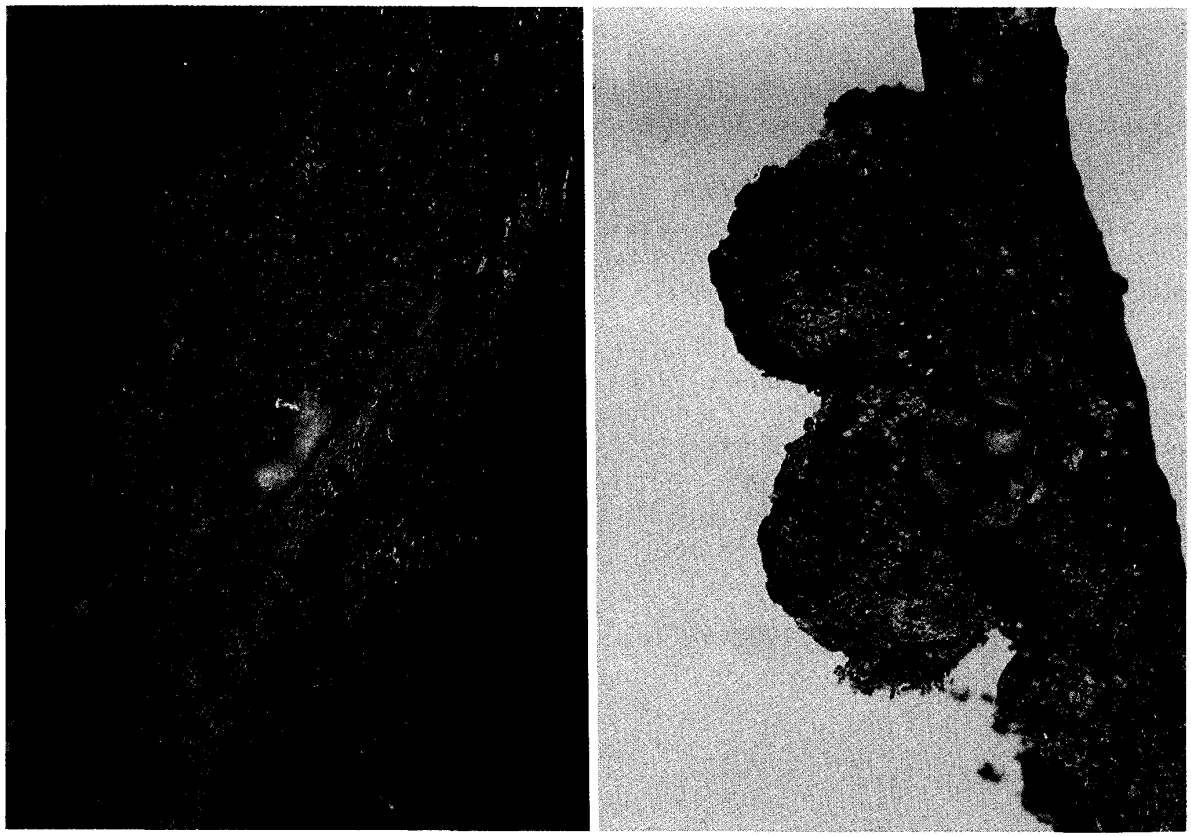
Westeria floribunda (Leguminoseae) : 1 ♂, Japan, Honshu, Shizuoka-ken, Hamamatsu-shi, Miyakoda-cho, em. 3. IV. 1995, K. Hirao leg. ; 2 ♂ 7 ♀, with same locality and host plant, em. 7. II-4. III. 1996, Y. Arita & K. Hirao leg. Genitalia on slide nos ♂ 1727YA, ♀ 1695YA.

Carpinus japonica (Betulaceae) : 10 ♂ 12 ♀, Japan, Honshu, Tokyo-to, Chofu-shi, Jindaiji-cho, em. 24-30. IV. 1996, M. Ikeda leg. ; 3 ♂ 5 ♀, with same locality and hostplant, em. 9-18. V. 1996, M. Ikeda leg. Genitalia on slide ♀ 1701 YA.

Alnus serrulatoides (Betulaceae) : 1♂1♀, Japan, Honshu, Aichi-ken, Asuke-cho, Wachi-



Figs 1–8. *Synanthedon tenue* (Butler), adults. 1. Emerged from gall of vine of *Westeria floribunda*, ♂. 2. *Ditto*, ♀. 3. Emerged from trunk of *Carpinus japonica*, ♂. 4. *Ditto*, ♀. 5. Emerged from trunk of *Alnus serrulatoides*, ♂. 6. *Ditto*, ♀. 7. Emerged from trunk of *Quercus glauca*, ♂. 8. Freshly emerged female from *Westeria floribunda*.



Figs 9–10. *Synanthedon tenue* (Butler). 9. Mature larva in gallery of *Carpinus japonica*, exposed. (By courtesy of Mr S. Yamaguchi). 10. Mature larva in gall (knot) on vine of *Westeria floribunda*, exposed.

hara, em. 2 (♂), 18 (♀). V. 1996, O. G. Gorbunov & K. Fukuzumi leg.

Quercus glauca (Fagaceae): 1 ♂, Japan, Honshu, Okayama-ken, Akaiwa-gun, Kumayama-cho, em. 6. VI. 1996, Y. Arita leg.

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摘　　要

ヒメコスカシバ *Synanthedon tenue* (Butler) (鱗翅目，スカシバガ科) の日本からの4新食樹の記録 (有田豊・Oleg G. Gorbunov・池田真澄・平尾和昭)

スカシバガ科のヒメコスカシバ *Synanthedon tenue* (Butler) は多食性のスカシバガであり (Arita & Gorbunov, 1995)，いままでに次の5種類の食餌植物が記録されている：カキノキ (カキノキ科)，ヤナギの1種 (ヤナギ科)，クリ，カシワ (ブナ科)，クマイチゴ (バラ科) (Yano, 1961；有田ほか, 1994；Arita, 1994；Arita & Gorbunov, 1995).

今回，さらに次の3科にわたる4種類の植物が新たに食餌植物として確認されたので記録する．フジ *Westeria floribunda* (マメ科 Leguminoseae) の細いツルにゴールを形成し (Fig. 10)，ゴールから本種の成虫が羽化してきた (Figs 1, 2, 8)．クマシデ *Carpinus japonica* (カバノキ科 Beturaceae) の太い主幹の樹皮下に潜り (Fig. 9)，そこから成虫が羽化した (Figs 3, 4)．カワラハンノキ *Alnus serrulatoides* (カバノキ科 Beturaceae) の細い幹に潜り，そこから成虫が羽化してきた (Figs 5, 6)．アラカシ *Quercus glauca* (ブナ科 Fagaceae) の樹幹の樹皮下を食害しているカシコスカシバ *Synanthedon quercus* (Matsumura, 1911) の幼虫を木屑とともに採集し，飼育をしていたところカシコスカシバと共に本種が羽化してきた (Fig. 7).

ヒメコスカシバの食餌植物は6科9種類が記録されたことになる．

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